send subscriptions to the Alumnae Association, but there was difficulty in sending the money, except from the ports. They are busy, but all wish the report that they may know of home doings." Dr. Griscom suggests "some definite and regular system of communication." She says, "Could not members individually agree to write some one?" It would surely cement a bond between the better class of silent workers in the field and the doctors at home.

In answer to where doctors are most needed, Dr. Griscom says, "Everywhere." There is no one man or woman, in Mongolia, Manchuria is scantily equipped. Shantung is very few. In Fukien, Dr. Griscom traveled for days alone with a cook and visited women, working in these distant stations utterly alone.

The problems of medical work in the East, Dr. Griscom says, will only be solved in getting Chinese educated to take care of their own people. That is being slowly done, but as yet without concerted action by all the missions. The China Medical Missions Association recommends colleges in seven of the capital cities and ports. These are for men. Women are still struggling for recognition. In Korea women are wanted as nurses only. In China women are working their way in, quietly and well. There is a co-educational medical school in Canton doing good work and gradually raising its standard. The Chinese men and women still need a westerner at the head of an undertaking.

The President: I hope Dr. Griscom will be informed that her paper was not "read by title," as she apprehended, but was read and listened to with a great deal of pleasure by those present at this meeting.

The Needs of the Mission Boards

Dr. Ellen C. Potter

This college and its Alumnae have played so important a part in the development of medical missions among the women and children of the Orient, that it seemed fitting at this time, which is a time of special difficulty for the boards, that their need should be presented to you.

If I may I will recall to your minds that up to 1855 it had not occurred to any one that there was any special field for the work of women physicians in foreign lands. To only a small extent were the services of such physicians used, it being assumed that the preaching of the Gospel alone was sufficient to attract and to convert the heathen people.

Dr. Shurtleff, a graduate of the class of 1853 of the Woman's Medical College, conceived the idea that there was a special work for the woman physician on the foreign field. After completing her medical course she supplemented this by three years of work done on the wards of the Philadelphia Hospital as superintendent of nurses. With such unusual
preparation she offered herself to the Board, only to be refused on the ground that she was an unmarried woman.

Some ten years later women had themselves entered upon the active management of mission boards at home; their insight had discovered the very special and urgent need of women physicians within the closed doors of the zemans; and their belief in the capacity of their own sex to undertake such medical work (without the support of a husband) found its justification in the results accomplished by Dr. Clara Swain of the class of 1869.

Since that day the scope of medical missions has expanded tremendously. The more efficient the work has been the greater has become the demand for its extension, and we now find the societies with a very splendid equipment, in some instances with most modern hospitals, with nurses' training schools, with medical schools and with schools for pharmacists. We find also many less well-equipped hospitals, with dispensary stations and with itinerating services. In other regions the medical service is rendered not by physicians but by trained nurses or by lay members of the organization.

With satisfactory equipment as to hospital buildings and accessories we find some of these closed because of lack of workers. Dispensary services have of necessity been abandoned; hospitals stand idle, and many of the physicians on the field are deliberately endangering their lives while they maintain the work, waiting for even a brief furlough.

A recent statistical study made of the needs of the Boards brought to light the following figures:

Thirty-four societies have published their need of workers. A tabulation of these statements gives a call for 33 physicians, the sex not being stated; in addition 26 male physicians and 31 female, a total of 100, are needed at once. Two dentists and 48 trained nurses are also called for.

In some instances the Boards have sought candidates to fill these positions for from three to five years.

We may account for this increased demand and diminished supply in several ways.

First: The increased requirements of the medical course, together with the increased cost of tuition, has served to materially decrease the number of medical students.

The number of students in 1901 were 28,142; in 1913 it was 17,015, a decrease of 39.5 per cent. The medical students who graduated in 1913 in the United States numbered 3381. Of these 3194 took state board examinations and only 2809 of that number were licensed to practise. Bulletin No. 4, Carnegie Foundation for the Advancement of Teaching, states, "An annual production of 3500 physicians will be necessary to meet the demands in this country for at least the next generation." It is obvious that the "production of physicians" during the last year has fallen far short of the number estimated to be needed for work in the home land and no surplus is therefore available for the work in foreign lands.

This decrease among medical graduates is more marked among women than among men, the percentage decrease among women being 36.8 per cent, while among men it is 30.4 per cent, in the last ten years.

Those of us who are connected with hospitals in which interne services are open to women are impressed by the decrease in the number of applicants for such service and those of us in active dispensary practice feel the progressive diminution in the number of available dispensary assistants.
Second: The diminution in the number of candidates is dependent upon the increased qualifications demanded by the Boards.

During the past year the Mission Boards have undertaken to standardize the preparation of all missionaries by formulating the minimum requirements as to preliminary training, professional education, mental and social capacity, etc., and it has been my privilege to serve upon the committee which has formulated the requirements for medical missionaries.

It has become the policy of the Boards to send to the field for all lines of work candidates capable of becoming leaders; men and women with minds broad enough to conceive great things and with capacity both mental and physical to execute.

It follows that the selection of candidates is made with much greater care than formerly. It may be well for me to read to you the statement of the general qualifications as formulated by the Boards:

**General.** The same general qualifications are requisite which are justly esteemed to be the conditions of success at home: an unimpaired physical constitution; good intellectual ability, well disciplined by education, and if possible by practical experience; good sense; sound judgment of men and things; *capacity for leadership;* versatility, tact, adaptation with others; *ability to yield to the will of the majority;* persistent energy in the carrying out of plans once begun—all controlled by a *single-hearted, self-sacrificing devotion to Christ and His cause.*

**Mental powers and scholarly attainments of the highest order, executive ability and capacity for organizing and superintending, and ample scope in the missionary field.** Power in public address is as desirable and as useful in the work abroad as at home.

**Special.** Those who expect to be engaged mainly in teaching should not only be thoroughly prepared by their scholarly attainments and intellectual discipline, but should have shown special fitness by their success in actual service, not only in the general work of teaching, but in *molding character,* shaping the minds and hearts of their pupils.

A *missionary physician* should have both a collegiate and a medical education, and this should be supplemented by at least one year’s experience as intern or assistant in a hospital or its equivalent in actual practice. He should be prepared to make his professional knowledge and skill *directly subservient to the furtherance of the Gospel.*

Medical candidates are further expected to qualify themselves by passing the State Board Examinations before going to the field.

The character of the work required by the Boards is indicated when it is stated that one of the medical candidates is needed as a professor in a medical school; several are needed to take full charge of hospitals; others to take up active surgical practice; still others to organize new work.

The third factor limiting the number of missionary applicants is the extremely small compensation offered, in some instances scarcely a living wage, if you concede that a living wage should enable one to provide for the future. Certain Boards provide a modest pension for missionaries who have been retired from service, but this practice is not general.

Old age or disability therefore finds the medical missionary in a precarious position, with no financial resources for the proverbial “rainy day,” and with uncertain prospects for the development of a lucrative practice in the home land, if sufficient health remains to make this possible. It is evident, therefore, that it takes a most unusual type of self-sacrifice to prompt one to undertake the service.

The increased demand for medical candidates is accounted for by the
fact that this particular type of work has demonstrated its usefulness in opening the hearts of the people to the Gospel, and not only so, but it increases the efficiency of the work itself by conserving the health of the staff on the field.

It is a fact worthy of note that of the 170 (approximately) medical women now on the field, sent out by the Boards of the United States, more than 25 per cent, are graduates of our College. Numbers alone do not signify that the work done has been worth while, but to those of you who knew of Clara Swan, Elizabeth Reifsnyder, Pauline Root, Mary Fulton, Jessica Carlton, Dr. King Eng, Mary Noble, and scores of others whose names I do not mention, it must be evident that the work these women have done has been worth while, including as it does the building of hospitals and the organization of the hospital service; the training of native nurses and pharmacists; the training of native medical helpers and the establishment of a medical school; the translation of medical books into the language of the adopted country, and last, but by no means least, the successful treatment whether medical or surgical of hundreds and thousands of patients who through this ministration have come into vital touch with the power of the Gospel.

The problem which presents is that of increasing the number of suitable medical candidates presenting themselves to the Boards.

Mr. F. P. Turner, General Secretary of the Student Volunteer Movement for Foreign Missions, has expressed it as his opinion that the solution lies in the establishment of scholarships by the Mission Boards, or others interested, for young women who contemplate mission work.

Two years ago I communicated with the various medical schools to which women are admitted, asking what concessions, if any, were made to prospective missionary candidates. With the exception of the University of Syracuse, the College of Physicians and Surgeons of Chicago, and the Woman's Medical College, the replies all stated that no scholarships and no reduction of tuition fees were offered.

There is therefore a considerable field for endeavor in that direction. The woman physician, by encouraging other women to undertake the study of medicine, will indirectly increase the number who volunteer for foreign service.

At this time of stress for the Mission Boards, and at this time which is also one of stress for our Alma Mater, could any thing be more suitable than that we should cooperate to meet two great needs by securing scholarships for missionary candidates in this school which has, in truth, been the mother of medical missions for the women of the Orient, and to cooperate in increasing the number of candidates by encouraging young women to undertake the study of medicine, a study which opens to them the doors of opportunity?

Discussion

The President: We are privileged to be present this morning to listen to two such interesting and inspiring papers; to hear personally from one of our Alumnae who is doing this work in the Orient, and then to hear Dr. Potter's splendid report of the Medical Missionary work in the East and the opportunities that are open to trained young women. I hope we shall all take away
with us this message of the need of the women in the Orient and will encourage women to come to this school to be educated so as to undertake this work.

Dr. Frances X. Baker: I must tell you in the beginning that while I was away I saw very little of the work of medical missionaries. I can fully endorse all that has been said upon the need in the East of well-trained medical women. It would be throwing away valuable material to send such women as Dr. Potter’s report suggests, because it will be several hundred years before they are appreciated. The native-born women are regarded chiefly as beasts of burden. One of the places visited was the leper hospital, outside the walls of Jerusalem, under the care of the German Luthers. They have no resident physician; simply a sisterhood that would correspond to our trained nurses. They have about 15 patients. The grounds are beautiful. The main thing that struck me was the need of teaching. There were no women physicians in the country. Dr. Eddy is at Beirut, where she has a tuberculosis hospital up in the Lebanon Mountains. At the hospital outside of Constantinople there is no woman physician; a trained nurse seemed to be in charge. I did not get much information about that hospital. I judge the patients were tubercular. Two things most impressing were two talks I had: one with a gentleman forty years in Damascus—Dr. Hamour, who said the awakening of the women was one of the most interesting things that had come to him in his work there, that women were beginning to throw off the shackles that both the Moslem and Jewish women wanted to be taught. He said it was the suffrage movement in Damascus. I talked with a missionary from the Eastern coast of Africa. He was Irish by birth, educated and went out as an Episcopalian minister. He said when he first went out that the people had nothing, that to massacre one another was their principal business. They now know our language and are anxious to be taught. This gentleman said that before he came away on his vacation these people came up to hear the story of the Saviour, and that the last time he held services before starting home the house was crowded and the people taking communion together who some years before did nothing but destroy one another.

Dr. Elizabeth F. Lewis: I came from near Peking, and Dr. Griscom’s paper described the work there. We have three stations, one at Peking. For seven and a half years I had been working in Peking, and the next two on the Island, going about because of the scarcity of doctors. I was sent to Peking to help Dr. Leonard, who was greatly overworked. At our medical association meet-
ing in Peking one of the strongest papers stated that men should
be sent to the medical schools in China. The Association voted
that there should be five medical schools through China. They
have medical work but no surgery. Acupuncture is used for
almost every disease. I was called to one case a few months' preg-
nant. The needle had been inserted in the fundus of the uterus
and the patient was almost exanmminated. The need presented
by Dr. Potter is well shown. It always goes to my heart when I
see a lot of earnest young men and women around the hospitals,
and I wish they would get out into the world where they are
needed. They would have the whole field in China and are in
demand, while here they are not. There the people have one
doctor to 150,000; here 1 to 900. It is certainly pitiful.

Dr. Anna Degenring: The work by women and for women in the
Orient cannot be overestimated. It attacks the very centre of
the national life. When we educate the women we can elevate
all of India. We have there a hospital with about thirty-five beds,
but we can accommodate 55 or 60, because we put them on mats
between the beds. No one can tell you how great the need is in
India. This need is due perhaps to four reasons: The irre-
 sponsibility of the people. A man does not care what becomes of
his neighbor. If he has smallpox he does not care if he gives it
to his neighbor. Another cause is their very great ignorance,
and their superstition. Medical science has made no progress
since the dark ages. Many of the mothers murder their babies
by burning them with a hot iron to burn out the demons, and
many are poisoned by the giving of an herb mixture which they
are accustomed to use. When the women come to the dispensary,
if we ask them their name, they will say, "Did you ask my name?"
We do not have to ask them whether they are married, because
over a certain age every woman is married. If you ask, a low-
caste woman her age, she will reply, "How should I know?" They
always want a careful examination, and they want a diet: given it
they usually go away satisfied, but generally eat what they please.
One thing I would like to emphasize that is not usually under-
stood, that being a missionary is not exclusively a man's job;
not a woman's. I want to tell you how very happy I am in being
a medical missionary. It requires all the skill one can get to be
useful in India. In the years I have been in India we have tried
to make all the doctors register, for there has been heretofore no
registration; any one could practise. But by doing this we have
cut our own throats, for a law has been passed by which a number
of our American doctors at present cannot practise. However,
some provision will be made to overcome this.
Dr. Bredschmidt: I spent six months in the mission field. The rest of the two years was spent in Turkey. I traveled all through the Holy Land, visiting the stations and found the needs of the medical work there. In Syria Dr. Eddy has a tuberculosis hospital. I met her personally and heard a great deal about her work. We were on Mt. Carmel for six months. Three months after we arrived the German Consul offered us land for a hospital. Other people offered different donations and wanted us to stay. Not being able to stand the climate we left the field. When I sat here this morning, though glad to be back, there are so many people needing medical missions that I feel my heart is in the field.

Dr. Sarah Taylor: Dr. Swain was one of our most modest graduates, and we all loved her. She graduated the same year I did, in 1869—forty-five years ago.

Dr. Baker: I should like to ask Dr. Potter who prepared the list of qualifications which she has given us as needed in medical missions.

Dr. Potter: In reply to Dr. Baker, the list combines the wisdom of the thirty-four Boards of the United States. They do not, however, expect to find all in one individual.

The President: Dr. Macfarlane, as Vice-President of the Alumnae Association, will O. K. the money that has been subscribed before turning it to the Board of Corporators.

Dr. Leo, Treasurer of the Graduate Council: It certainly is a proud moment for me to be able to hand to the Board of Corporators $1,000, collected by Dr. Marie L. Bauer and presented by Miss Nina Lea. Besides that, for the last three weeks circulars have been sent out asking for contributions to the Emma E. Musson Lectureship Fund, and I am glad to have received $600 for this purpose.

Mrs. Lewis: Speaking for the Board of Corporators, I acknowledge this generous contribution that Miss Lea has made to Dr. Bauer. As you know, our Endowment Fund has grown quite considerably this year. Whatever the College decides to do in the future it must be well financed. In regard to the other money that is coming for the Emma E. Musson Scholarship Fund, I am glad to report that the treasurer of that fund has $1,475, with one or two promised subscriptions coming in later. It would be safe to call the amount $1,500, and with this very generous contribution from the Alumnae we shall easily bring the amount up to $5,000. I think it wise to turn over the $2,500 to the Board of Corporators.

Dr. Van Gasken: I was hoping that Mrs. Lewis would change
the name of the fund, calling it a Memorial Fund which could be used as a lectureship. We of the Alumnae Association felt that a scholarship would benefit the student, while a lectureship would benefit the whole department.

Mrs. Lewis: The people who loved Dr. Munson are sending in sums to be expended through the College in honor of her memory. We shall have to come to an agreement as to the exact expenditure of these funds, but I am sure there will be no difficulty about that. Her patients and friends who have contributed have done so in the spirit of love and with the desire for some form of remembrance that would have pleased her. I am very glad indeed that the sum we are raising is reaching such large proportions.

The President: I might also announce that the Hannah T. Croasdale Fellowship Fund has been increased by the sum of $300, making now a total of $4800 in this fund.

Glandular Therapy in Gynecology (with Lantern Demonstration)

By Dr. Catharine Macfarlane

In choosing "Glandular Therapy in Gynecology" for the subject of this paper, I was guided not only by my own intense interest in the subject, but also by my conviction of its great practical importance to the general practitioner as well as to the specialist.

While even a cursory review of the literature of glandular therapy reveals a chaos of conflicting observations, it has seemed possible, on the basis of a large clinical experience, to classify certain groups of cases which are of practical value from the therapeutic standpoint, and to which I now wish to call your attention.

Gynecological organotherapy had its beginning in 1896, when Landau, of Berlin, reached the conclusion that the vasomotor and nervous disturbances following double oophorectomy were in all probability due to loss of ovarian activity, and might possibly be relieved by the administration of ovarian substance, just as the analogous condition of cachexia strumipriva or myxedema following thyroidectomy was so promptly relieved by the administration of thyroid substance.

Landau's first case, reported by his assistant, Mainzer, in the Deutsche medizinische Wochenschrift of 1896, seems well worth recording in detail, for although it may seem trite to the present audience, it marked an epoch in gynecological therapeutics.

The patient was a twenty-three-year-old girl upon whom a bilateral salpingo-oophorectomy had been performed, followed by an uneventful recovery; three weeks after leaving the hospital she began to complain of symptoms of the artificial menopause—hot flashes, sweats, headache, and insomnia. During a year and a half she was treated with drugs, baths, counter-irritation, and hypnosis without avail. At the end of